



Phase 2 Safety and Efficacy Study of CLBS03 Autologous T-Regulatory Cells in Adolescents with Recent Onset Type 1 Diabetes Mellitus

Grant Award Details

Phase 2 Safety and Efficacy Study of CLBS03 Autologous T-Regulatory Cells in Adolescents with Recent Onset Type 1 Diabetes Mellitus

Grant Type: Clinical Trial Stage Projects

Grant Number: CLIN2-09730

Project Objective: Phase II Trial completed

Investigator:

Name: Douglas Losordo

Institution: Caladrius Biosciences

Type: PI

Disease Focus: Diabetes, Type 1 diabetes

Award Value: \$12,211,255

Status: Active

Grant Application Details

Application Title: Phase 2 Safety and Efficacy Study of CLBS03 Autologous T-Regulatory Cells in Adolescents with

Recent Onset Type 1 Diabetes Mellitus

Public Abstract:

Therapeutic Candidate or Device

Autologous Ex Vivo Expanded Polyclonal CD4+CD25+CD127lo/-FOXP3+ Regulatory T-cells (CLBSo₃)

Indication

Early Onset Type 1 Diabetes Mellitus with Residual Beta Cell Function

Therapeutic Mechanism

It must be acknowledged that the mechanism(s) by which the effector arm of the immune system becomes unrestrained in the setting of T1D, resulting in the immune destruction of pancreatic beta-islet cells, is not known at this time. Available evidence indicates that Tregs maintain immune balance by modulating multiple facets of the effector arm of the immune system at least in part by control of differentiation of multipotent progenitor/stem cells.

Unmet Medical Need

No therapy aimed at maintaining or restoring pancreatic beta islet cell function is currently approved for Type 1 diabetes mellitus (T1D). As a result children with T1D face lifelong struggles with glycemic control and, despite careful management, an increased risk of severe complications.

Project Objective

Phase 2 trial completed

Major Proposed Activities

- Enrollment and treatment of the remaining 92 subjects in the phase 2 clinical trial
- Manufacturing investigational product for the remaining subjects in the trial

California:

Statement of Benefit to All cell manufacturing for this study will be performed in California. Accordingly this project will have an immediate positive effect on employment of highly skilled workers in California. The demonstration of preservation of beta-islet cell function, with attendant reductions in exogenous insulin requirements, would provide compelling clinical evidence to advance this therapy and would provide strong momentum toward advancing a cure of T1D. Such a cure would benefit California and the world.

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